

Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A process for producing paper with mechanically processed waste cellulose acetate fiber, comprising the steps of:

(a) providing a raw material in the form of waste long staple or continuous filament cellulose acetate fibers, wherein the fibers are crimped at a rate of at least one crimp per centimeter;

(b) mechanically shredding the waste cellulose acetate to a fiber length of less than about 14 mm;

(c) mixing the shredded waste cellulose acetate with cellulose to form a slurry; and

(d) making paper from the slurry.

Claim 2 (currently amended): The process of claim 1 wherein the waste cellulose acetate fiber contains substantial crimp in the range of 1 to 20 crimps per centimeter.

Claim 3 (currently amended): The process of claim ~~[[2]]~~ 1 wherein the ~~crimp is produced by mechanical interfiber plasticizer bond separation due to shredding process~~
does not include hydrolysis.

Claim 4 (original): The process of claim 3, and further comprising the step of repulping the mechanically shredded cellulose acetate and cellulose with water.

Claim 5 (original): The process of claim 4, and further comprising the step of repulping is conducted with periodic or continuous high shear agitation.

Claim 6 (original): The process of claim 5, and further comprising the step of confricating or mechanically refining the aqueous mixture of cellulose acetate and cellulose.

Claim 7 (original): The process of claim 6, and further comprising the step of blending the aqueous mixture of cellulose acetate and cellulose with paper manufacturing fillers and sizes.

Claim 8 (original): The process of claim 7 wherein the paper comprises between about 90 and about 99% by weight of cellulose and between about 1 and about 10% percent by weight of cellulose acetate fiber having a length of less than about 14 mm.

Claim 9 (original): The process of claim 1 or 8, and including the steps of:

- (a) forming the paper product into a continuous paper web with a weight of about 15-40 grams/meter²; and
- (b) fabricating the paper web into cigarette filter tips.

Claim 10 (currently amended): A process of claim 1 or 8, and including the steps of:

- (a) forming the paper product into a continuous paper web weighing 200-800 grams/meter²; and
- (b) ~~fabricating the paper web into~~ hammer milling the paper web into individually shredded fibers for use in the manufacture of absorbent paper products selected from the group consisting of feminine hygiene articles, adult incontinent diapers and infant diapers.

Claim 11 (original): The product formed according to the process of claim 9.

Claim 12 (original): The product formed according to the process of claim 10.

Claim 13 (new): The process of claim 1, wherein the step of mechanically shredding the waste cellulose acetate comprises shredding the acetate fibers no more than once.

Claim 14 (new): The process of claim 1, wherein the acetate fiber contains plasticizer.